

*Gobæa copiosana*, Walk., p. 1805; type lost, description unrecognisable.

The following descriptions, erroneously placed by Walker under various groups, refer truly to species of the *Tortricina*.

*Scopula arcuatalis*, Walk., = *Arotrophora arcuatalis*.

*Tinea admotella*, Walk., p. 485 = *Capua semiferana*.

*Gelechia intactella*, Walk., p. 652 = *Tortrix leucaniana*.

„ *ad reptella*, Walk., p. 654 = *Paramorpha adreptella*.

*Eromene transcissella*, Walk., p. 1762 = *Arotrophora arcuatalis*.

„ *apertella* Walk., p. 1762 = *Heliocosma incongruana*.

#### ADDENDUM.

##### Holocola triangulana.

Whilst this paper was passing through the press, I have bred the above species from the larva. Larva moderate, cylindrical, slightly thickest in middle; whitish-grey, faintly purplish-tinged; head and a plate on second segment ochreous-brown: it feeds in a good deal of web and refuse amongst spun shoots of *Acacia decurrens*, (*Leguminosæ*). Pupa with a transverse row of small close oblique spikes on each abdominal segment, stronger posteriorly; lying free where the larva fed. The larva was found in August, and the imago emerged early in November.

#### ON THE PLANTS OF NEW SOUTH WALES—No. III.

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Of the remaining orders of the Calycifloræ, eighteen are represented in Queensland, fifteen in New South Wales, and twelve in Victoria, so that including the great order Leguminosæ, we have

	Orders.	Genera.	Species.
Queensland ..	19 ..	168 ..	506
New South Wales	16 ..	124 ..	524
Victoria .. ..	14 ..	76 ..	349

The orders which do not extend to Victoria are the Melastomaceæ, Passifloræ, Rhizophorea, Combretaceæ, Samydaceæ, and Cornaceæ, whilst the third, fourth, and fifth of these are not represented in New South Wales. Of the Myrtaceæ, 19 genera, including 129 species, are indigenous in New South Wales, and constitute by far the greater portion of the forest trees. The genus *Eucalyptus* alone numbers 50 species, and these comprehend all those trees popularly known as Gum Trees, Box, Blackbutt, Woolly Butt, Stringy Bark, Bloodwood, Mahogany, Peppermints, and Iron-Bark. *Angophora* or Apple has 4 species, *Syncarpia* or Turpentine 2, *Myrtus* 5, and *Eugenia* 4; whilst the species of *Leptospermum*, *Melaleuca*, and *Callistemon*, which are known by the names of Tea-tree, Bottle-brush, &c., amount to 33. Whether considered in the extensiveness of its range, the commercial and medicinal value of its timbers, barks and resins, the beauty of its flowers or the utility of its fruits, the order of Myrtaceæ is certainly the most important in Australia. The species divide themselves into those which are fleshy-fruited, and those which are capsular. Of the former, the most valuable occur in the Tropical parts of the continent, very few occurring in New South Wales, and only one (*Eugenia Smithii*, Poirs.), extending to Victoria. In Queensland the species of *Eugenia* (which genus, according to Mr. Bentham, includes all the Myrtles that have fleshy fruits), are 14, whilst 4 only are common to New South Wales. The genera of this section are for the most part Tropical, and are found both in Asia and America; but those which are capsular, (that is having dry debiscent fruits,) are nearly all peculiar to Australia. A few species are found in New Caledonia and the Indian Archipelago, whilst *Metrosideros* and *Leptospermum* are represented in New Zealand, the former by *M. diffusa* (Smith) and *M. villaosa* (Smith), and the latter by *L. Scoparium* (Smith), "the leaves of which were used by Capt. Cook's Ships' Crews as tea, whence they named it the tea-plant (Don)." It is remarkable that this

circumstance should have caused not only *L. Scoparium* (which is common to New Zealand and Australia), but all its congeners to be denominated Tea-trees. In Victoria the principal genera of the Myrtaceæ are *Bæckia*, *Melaleuca* and *Eucalyptus*, comprehending respectively 7, 12, and 30 species. The genus *Eucalyptus*, of which in Willdenow's *Species Plantarum* (1799) only 12 species are enumerated, is now known to have some 150 distinct forms, and of these, one third occur in New South Wales. It is a curious fact in the distribution of plants that very few species occur out of Australia. Mr. Bentham remarks: "With the exception of two species extending to Timor, and two or three or perhaps one single somewhat doubtful species from the Indian Archipelago, the Eucalypti are all Australian." Since the publication of the 3rd Vol. of the *Flora Australiensis*, however, Baron F. von Mueller, in his *Eucalyptographia* (Decade 4.) under *E. alba* (Reinwardt) states that: "The number of Extra-Australian species of *Eucalyptus* is extremely limited, so far as hitherto known, although additional congeners may perhaps yet be obtained from New Guinea, and even there possibly from Alpine regions." He then mentions as Extra-Australian not only *E. alba*, but also *E. moluccana*, (Roxb.), *E. Decaisneana*, (Blume) and *E. Papuana*, recently described by himself in his notes on Papuan Plants. The Baron regards the absence of *Eucalyptus* from the vegetation of New Zealand as very remarkable, and more especially as "an Eucalyptus-like tree has recently been recorded from New Ireland by the Revd. W. Brown as forming forests in that island."

The following is a list of the Eucalypts indigenous in New South Wales, arranged principally according to Baron Mueller's cortical system.

#### LEIOPHLOË.

- |                                    |                                |
|------------------------------------|--------------------------------|
| 1. <i>E. stellulata</i> , (Sieb.)  | 3. <i>E. radiata</i> , (Sieb.) |
| 2. ,, <i>coriacea</i> , (A. Cunn.) | 4. ,, <i>saligna</i> , (Sm.)   |

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| 5. <i>E. gracilis</i> , (F.v.M.)    | 12. <i>E. tereticornis</i> , (Sm.)  |
| 6. ,, <i>hæmastoma</i> , (Sm.)      | 13. ,, <i>punctata</i> , (DC.)      |
| 7. ,, <i>uncinata</i> , (Turcz.)    | 14. ,, <i>Gunnii</i> , (I. Hooker.) |
| 8. ,, <i>dumosa</i> , (A. Cunn.)    | 15. ,, <i>maculata</i> , (Hook.)    |
| 9. ,, <i>incrassata</i> , (Labill.) | 16. ,, <i>obtusiflora</i> , (DC.)   |
| 10. ,, <i>viminalis</i> , (Labill.) | 17. ,, <i>stricta</i> , (Sieb.)     |
| 11. ,, <i>rostrata</i> , (Schecht.) |                                     |

## HEMIPHLOÏE.

- |                                       |  |
|---------------------------------------|--|
| 18. <i>E. Sieberiana</i> , (F.v.M.)   | 23. <i>E. longifolia</i> , (Lk. & Otto.) |
| 19. ,, <i>pilularis</i> , (Sm.)       | 24. ,, <i>Stuartiana</i> , (F.v.M.)      |
| 20. ,, <i>largiflorens</i> , (F.v.M.) | 25. ,, <i>oleosa</i> , (F.v.M.)          |
| 21. ,, <i>hemiphloia</i> , (F.v.M.)   | 26. ,, <i>melliodora</i> , (A. Cunn.)    |
| 22. ,, <i>brachypoda</i> , (Turcz.)   |  |

## RHYTIPHLOÏE.

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| 27. <i>E. microcorys</i> , (F.v.M.) | 33. <i>E. terminalis</i> , (F.v.M.)  |
| 28. ,, <i>acmenoides</i> , (Schan.) | 34. ,, <i>eximia</i> , (Schan.)      |
| 29. ,, <i>botryoides</i> , (Sm.)    | 35. ,, <i>polyanthema</i> , (Schan.) |
| 30. ,, <i>robusta</i> , (Sm.)       | 36. ,, <i>populifolia</i> , (Hook.)  |
| 31. ,, <i>resinifera</i> , (Sm.)    | 37. ,, <i>pulverulenta</i> , (Sims.) |
| 32. ,, <i>corymbosa</i> , (Sm.)     |                                      |

## PACHYPHLOÏE.

- |  |                                     |
|--|-------------------------------------|
| 38. <i>E. amygdalina</i> , (Labill.)   | 42. <i>E. piperita</i> , (Sm.)      |
| 39. ,, <i>capitella</i> , (Sm.)        | 43. ,, <i>dealbata</i> , (A. Cunn.) |
| 40. ,, <i>eugenioides</i> , (Sieb.)    | 44. ,, <i>dives</i> , (Schan.)      |
| 41. ,, <i>macrorrhyncha</i> , (F.v.M.) |                                     |

## SCHIZOPHLOÏE.

- |                                       |  |
|---------------------------------------|--|
| 45. <i>E. siderophloia</i> , (Benth.) | 48. <i>E. sideroxylon</i> , (A. Cunn.) |
| 46. ,, <i>erebra</i> , (F.v.M.)       | 49. ,, <i>melanophloia</i> , (F.v.M.)  |
| 47. ,, <i>paniculata</i> , (Sm.)      |  |

Of the remaining Calycifloræ, the order of Passifloræ is represented by two genera and five species, none of which extend to Victoria; whilst of the Cucurbitaceæ, which are well represented in Queensland and North Australia, only one species *Sicyos angulata*, (Linn.) is common to the three colonies of Eastern Australia. *Momordica Balsamina*, (Linn.), which is regarded by Mr. Bentham as indigenous, is widely dispersed over Asia and Africa, and also extends to the New World. Some of the Ficoidea also have a wide range, for *Mesembryanthemum æquilaterale*, (Linn.) (the Pig-face of the Colonists) and *Tetragonia expansa*, (Murr.) (called "New Zealand Spinach") occur here and there along the coast from Tasmania to Northern Queensland. Of the Umbelliferæ there are 14 genera, 11 of which are found in New South Wales, 8 in Queensland, and all in Victoria, whilst the species are respectively 33, 17, and 34, thus showing, that although the order has species in almost all latitudes, the greatest number of them appear in the more temperate regions. Two species only of the Araliaceæ—(*Astrotriche ledifolia*, (DC.) and *Panax sambucifolius*, (Sieb.)—) occur in Victoria; and this is remarkable, as the difference between the Umbelliferæ and Araliaceæ (the latter of which are comparatively numerous in Queensland) is one rather of habit than of any decided character. The last order of the Calycifloræ, the Cornaceæ, is represented by a solitary species common to Queensland and New South Wales.

In addition to the 11 species of leguminous plants unknown here in the early days of the colony, but now widely dispersed throughout it, the following may be enumerated :

- Rosa rubiginosa*, (Linn.)
- Ænothera biennis*, (Linn.)
- Ænothera rosea*, (Willd.)
- Epilobium roseum*, (Sm.)
- Passiflora cærulea*, (Willd.)
- Ammi majus*, (Linn.)

FIG. 1

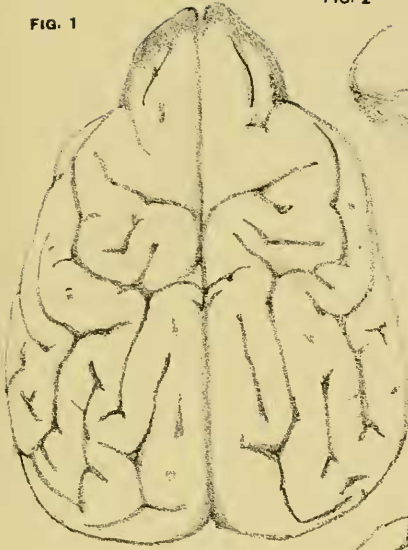


FIG. 2



FIG. 3

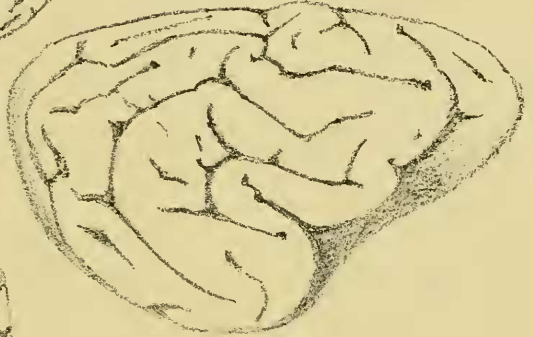


FIG. 4

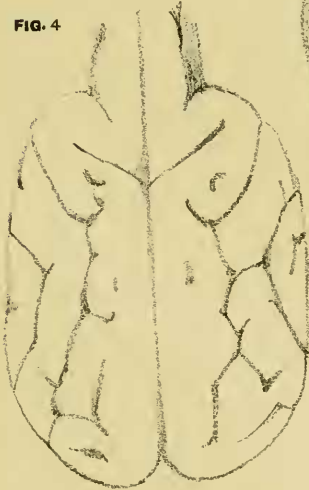
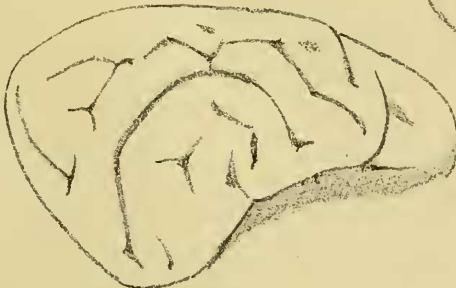


FIG. 5



FIG. 6



*MacLay*